

Laboratory Report
Experiment 8: Carbohydrates

Name:.....

<i>Compounds Reactions</i>	Observation						Conclusion
	Glucose	Fructose	Lactose	Maltose	Sucrose	Starch	
<p>Molisch Test</p> <p>1ml sugar solution + 1ml reagent (α-naphthol in 1ml ethanol) + 1ml conc. H_2SO_4 by drop carefully inside the wall of tube</p>							
<p>Conc. H_2SO_4</p> <p>Small amount of sugar in dry tube + 1ml conc. H_2SO_4 + heat</p>							
<p>Ammoniacal Silver Nitrate (Tollen's)</p> <p>0.5 ml of $AgNO_3$ + 2 drop 10% NaOH (black ppt.) + 5 drops NH_4OH</p> <p>add to sugar solution + heat (1-2min)</p>					-Ve	-Ve	

Ketose Test 1ml of sugar solution + 1ml conc. HCl + heat (1min)	-Ve		-Ve	-Ve		-Ve	
Hydrolysis by Acids/ Iodine test 1ml of sugar + heat for couple of seconds + 1 drop of iodine	-Ve	-Ve	-Ve	-Ve	-Ve		
Water Solubility Test Amount of sugar +1ml water							

Question: write the molecular structure of glucose and fructose, and what is the difference between them?